

Cont
a1
between said top ridge and said bottom sole; said lower portion located below said upper portion and said lower portion being within an approximate lower two-thirds of said rear surface in a direction between said bottom sole and said top ridge; said lower portion including a heel to toe, elongated cavity located solely in said lower portion of said rear surface .

34. The iron type golf club head of claim 33 wherein said elongated cavity is formed with a lower surface, a bottom side wall, a toe side wall, a heel side wall and an upper side wall; said walls defining the outer perimeter of said elongated cavity.

35. The iron type golf club head of claim 33 wherein said elongated cavity is recessed into said rear surface; said rear surface having a thickness between a lowermost surface of said elongated cavity and said ball striking face that is thinner than the thickness between the non-cavity portions of said rear surface and said ball striking face.

36. The iron type golf club head of claim 33 wherein said elongated cavity is recessed into said rear surface; said rear surface having a maximum thickness between an entire lower surface of said elongated cavity and said ball striking face that is thinner than the thickness between the non-cavity portions of said rear surface and said ball striking face.

37. The iron type golf club head of claim 33 wherein the said upper portion is adjacent to a top edge of said elongated cavity in said lower portion of said rear surface.

Cont
A1
38. The iron type golf club head of claim 33 wherein said rear surface further includes a mass extending in a heel to toe direction between said upper portion and said elongated cavity in said lower portion of said rear surface.

39. The iron type golf club head of claim 33 wherein a bottom edge of said upper portion is defined by a ledge coincident with a top edge of said elongated cavity.

40. The iron type golf club head of claim 33 wherein an insert material is located within said elongated cavity.

41. The iron type golf club head of claim 33 further including a weighted mass on said rear surface and located within said elongated cavity.

42. An iron type golf club head having a club head body and means for connection to a shaft; said club head body including a heel, toe, a ball striking face, a top ridge surface and bottom sole surface, wherein the improvement comprises:

a rear surface having an upper portion and a lower portion, said upper portion and said lower portion extending across said rear surface from adjacent said heel to adjacent said toe; said upper portion extending downwardly toward said bottom sole approximately one-third the distance between said top ridge and said bottom sole; said upper portion being further defined as a blade like structure with a generally uniform thickness; said lower portion located below said upper portion and being within an approximate lower two-thirds of said rear surface in a direction between said

Cont
41
bottom sole and said top ridge; said lower portion including a heel to toe elongated cavity located solely in said lower portion of said rear surface.

43. The iron type golf club head of claim 42 wherein said upper portion is further defined as having a non-cavity structure.

44. The iron type golf club head of claim 42 wherein said elongated cavity is formed with a lower surface, a bottom side wall, a toe side wall, a heel side wall and an upper side wall; said walls defining the outer perimeter of said elongated cavity.

45. The iron type golf club head of claim 42 wherein said elongated cavity is recessed into said rear surface; said rear surface having a thickness between a lowermost surface of said elongated cavity and said ball striking face that is thinner than the thickness between the non-cavity portions of said rear surface and said ball striking face.

46. The iron type golf club head of claim 42 wherein said elongated cavity is recessed into said rear surface; said rear surface having a maximum thickness between an entire lower surface of said elongated cavity and said ball striking face that is thinner than the thickness between the non-cavity portions of said rear surface and said ball striking face.

47. The iron type golf club head of claim 42 wherein the said upper portion is adjacent to a top edge of said elongated cavity in said lower portion of said rear surface.

Cont
C-1

48. The iron type golf club head of claim 42 wherein said rear surface further includes a mass extending in a heel to toe direction between said upper portion and said elongated cavity in said lower portion of said rear surface.

49. The iron type golf club head of claim 42 wherein a bottom edge of said upper portion is defined by a ledge coincident with a top edge of said elongated cavity.

50. The iron type golf club head of claim 42 wherein an insert material is located within said elongated cavity.

51. The iron type golf club head of claim 42 further including a weighted mass on said rear surface located within said elongated cavity.

52. An iron type golf club head having a club head body and means for connection to a shaft; said club head body including a heel, toe, a ball striking face, a top ridge surface and bottom sole surface, wherein the improvement comprises:

a rear surface having an upper portion; and a perimeter-weighted cavity lower portion; said upper portion extending downwardly toward said bottom sole approximately one-third the distance between said top ridge and said bottom sole; said upper portion being further defined as a non-perimeter weighted, blade type, iron structure of generally uniform thickness and extending across said rear surface from adjacent said heel to adjacent said toe; said lower portion located below said upper portion and said lower portion forming an approximate lower two-thirds of said rear

cont
Q1
surface in a direction toward said bottom sole from said top ridge; said lower portion including an elongated, perimeter weighted cavity extending in a heel to toe direction and a perimeter weight defining at least heel, toe and bottom sole portions of said cavity; said perimeter weighted cavity and said perimeter weight being located solely in said lower portion of said rear surface.

53. The iron type golf club head of claim 52 wherein said elongated, perimeter weighted cavity is formed with a lower surface, a bottom side wall, a toe side wall, a heel side wall and an upper side wall; said walls defining the outer perimeter of said elongated cavity.

54. The iron type golf club head of claim 52 wherein said elongated cavity is recessed into said rear surface; said rear surface having a thickness between a lowermost surface of said elongated cavity and said ball striking face that is thinner than the thickness between the non-cavity portions of said rear surface and said ball striking face.

55. The iron type golf club head of claim 52 wherein said elongated cavity is recessed into said rear surface; said rear surface having a maximum thickness between an entire lower surface of said elongated cavity and said ball striking face that is thinner than the thickness between the non-cavity portions of said rear surface and said ball striking face.

56. The iron type golf club head of claim 52 wherein the said upper portion of said rear surface is adjacent to a top edge of said elongated, perimeter weighted cavity in said lower portion of said rear surface.

Cont
C1
57. The iron type golf club head of claim 52 wherein said rear surface further includes a mass extending in a heel to toe direction between said upper portion and said elongated, perimeter weighted cavity in said lower portion of said rear surface.

58. The iron type golf club head of claim 52 wherein a bottom edge of said upper portion is defined by a ledge coincident with a top edge of said elongated, perimeter weighted cavity.

59. The iron type golf club head of claim 52 wherein an insert material is located within said elongated, perimeter weighted cavity.

60. The iron type golf club head of claim 52 further including a weighted mass on said rear surface located within said elongated, perimeter weighted cavity.

Sub
DI
61. An iron type golf club head having a club head body and means for connection to a shaft; said club head body including a heel, toe, a ball striking face, a top ridge surface and bottom sole surface, wherein the improvement comprises:

a rear surface having an upper portion and a lower portion; said upper and lower portion extending across said rear surface from adjacent said heel to adjacent said toe; said upper portion extending downwardly toward said bottom sole approximately midway between said top ridge and said bottom sole; said lower portion located below said upper portion and extending upwardly toward said top ridge approximately midway between said bottom sole and said top ridge; said lower

cont
A1

portion including a heel to toe, elongated cavity located solely in said lower portion of said rear surface.

Please amend claims 16, 18 and 19 as follows:

A2

16. The club head of claim 40 further including undercut retention means on rear cavity walls for retention of said ~~insert~~ material.

A3

18. The club head of claim 33 wherein said cavity is located on said lower portion of said rear surface toward said heel.

19. The club head of claim 33 wherein said cavity is located on said lower portion of said rear surface toward said toe.

REMARKS

**Reconsideration and Allowance
are Respectfully Requested**

Reconsideration of this application is respectfully requested in view of the foregoing amendment and the remarks that follow.

In response to the outstanding Office Action of December 2, 2002, Applicant has amended the application. Claims 1-15, 17 and 20-32 have been cancelled. New claims 33-61 have been added to the application.